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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Y. ALMOG, et al.

Serial Number:

09/529,289

Filed: ,

April 7, 2000

For: .

COATING SYSTEM FOR SUBSTRATES

Art Unit:

1774

Examiner:

Ling XU

Honorable Commissioner of Patents and Trademarks Washington DC 20231

DECLARATION OF YAACOV ALMOG

Sir:

- I am very familiar with polymer materials. I hold a B. Sc. in Chemistry and Physics from the Hebrew University of Jerusalem and a Ph.D. from the Wiezman Institute of Science in Rehovot, Israel. My doctoral work was in the Department of Plastics Research. I have been employed by Indigo Ltd., an Israel research and development company specializing in liquid toner imaging systems, since 1984. Since 1994 I have been in charge of research and development of coatings for substrates on which toner images are to be printed.
- 2. I am one of the inventors of the above application, and I am familiar with the application and the prosecution thereof before the United States Patent and Trademark Office. I am specifically aware that the Examiner has raised an issue regarding that fact that the underlayer coating, as set forth, for example, in Claim 1 as recently amended, can comprise reaction products of amino propyl triethoxy silane.
- 3. As one skilled in the art would appreciate, amino propyl triethoxy silane is one of a class of compounds, namely, silanes, that are known to be highly reactive. Attached hereto is a copy of an article entitled, "Tailoring Surfaces with Silanes," from A Survey of Properties and Chemistry, Edited by Barry Ackley, Gelest, Inc., 1995, pp. 36-37. The article specifically discusses certain alkoxy-substituted silanes and how such silanes react, for example, hydrolyze.
- 4 As set forth in my application, the underlayer coating may comprise amino propyl triethoxy silane. The outerlayer coating comprises a polymer material which can be water-based, as set forth, for example, in the example on page 7. When the outerlayer coating does comprise a water-based polymer material, it would be expected, and has been confirmed, that water in the

UDS Declaration

outerlayer coating reacts with amino propyl triethoxy silane in the underlayer coating to form reaction products of amino propyl triethoxy silane.

5. Consistent with the article referenced above, I would expect that amino propyl triethoxy silane in the underlayer would react under typical reaction or processing conditions. More specifically, I would expect that amino propyl triethoxy silane would be capable of reacting even with water from humidity in the air.

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under section 1001 of title 18 of the United States Code and such willful false statements may jeopardize the validity of any patent issuing thereon.

Date: 1/44 27, 3

Yaacov ALMOG